

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



October 27, 1999

Mr. Les Toth
5546 Old Salt Ln
Agoura Hills, CA 91301

Dear Mr. Toth:

THREE MOUNTAIN POWER PROJECT DATA REQUESTS NUMBERS 93 THROUGH 96

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission (Energy Commission) staff requests that the Three Mountain Power Project, Limited Liability Company supply the information specified in the enclosed data requests (Data Requests 93 through 96). These data requests address air quality.

Written responses to the enclosed data requests are due to the Energy Commission by November 29, 1999 or at such later date as may be agreed upon by the Energy Commission staff and the applicant. A publicly noticed workshop is tentatively scheduled for the first week in November, 1999, in Burney, to discuss these data requests. Staff will be available to answer questions regarding the data requests and the level of detail required to answer the requests satisfactorily.

If you are unable to provide the information requested in the data requests or object to providing it, you must, within 15 days of receiving these requests, send a written notice of your inability or objection(s) to both Chairman William J. Keese, Presiding Member of the Committee for this proceeding, and me. The notification must also contain the reasons for not providing the information and the grounds for any objections (see Title 20, California Code of Regulations section 1716 (e)).

If you have any questions regarding the enclosed data requests, please call me at (916) 653-1614.

Sincerely,

Richard Buell
Siting Project Manager

Enclosure

cc: Proof of Service 99-AFC-2

Shasta Co. APCD
Mr. Mike Kussow, APCO
1855 Placer Street
Redding, CA 96001

USEPA Region IX
Mr. Matt Haber
75 Hawthorne Street
San Francisco, CA 94105

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THREE MOUNTAIN POWER PLANT (99-AFC-2) DATA REQUESTS

Technical Area: Air Quality
Author: Tuan Ngo

BACKGROUND

The facility emissions were estimated to be 153 tons per year (TPY) of oxides of nitrogen (NO_x), 24 TPY of reactive organic gases (ROG) and 81.5 TPY of particulate matter (PM₁₀) using 5 start-ups and shut-downs per year (AFC Section 6.8.5.2, page 6.8-103). In the September 24, 1999, responses to the Shasta County Air Quality Management District (District), the applicant plans to operate the facility with 1 cold-start, 50 warm, 255 hot-starts and 306 shut-downs per year. The facility emissions, under this assumption, will be significantly higher than those estimated in the Application for Certification (AFC).

DATA REQUEST

93. Please verify the facility's number of start-ups (cold, warm and hot) and shut-downs per year.
94. Please provide revised calculations, including any assumptions and sample calculations, showing the facility daily and annual emissions using the correct number of start-up and shut-down cycles.

BACKGROUND

Staff believes that localized emissions from the Burney area cause violations of the state particulate matter less than 10 microns (PM₁₀) ambient air quality standard. These violations occur most frequently in the fall and winter months when residential wood heating devices are being used. The project PM₁₀ emissions could contribute to the existing violations; therefore, emission reductions should be secured to mitigate the emission increases from the project. Staff believes that the most effective mitigation for the project's PM₁₀ emissions is to obtain emission reductions from the Burney area. A review of the emission inventory in the Burney area indicates that a reduction of PM₁₀ emissions from the residential wood burning devices may be feasible, i.e., replacing of current wood stoves with U.S. Environmental Protection Agency (EPA) certified wood stoves. Staff believes that this mitigation measure will reduce the wood burning devices' emissions during the winter months, and other mitigation measures, such as road paving, may be used to mitigate the PM₁₀ emissions for other months of the year. Staff has begun discussions of this approach to providing mitigation for the project with the District, EPA and California Air Resources Board (ARB) staff. The following information is necessary to understand the potential for these mitigation measures.

DATA REQUEST

95. Please conduct a survey (a door to door canvass of the Burney area is preferred over a mail survey, since a canvass will likely result in a high response ratio) to quantify the number of households with wood stoves and fireplaces in the Burney area, and the amount of wood burned per household. This information will be used

THREE MOUNTAIN POWER PLANT (99-AFC-2) DATA REQUESTS

to establish the feasibility of replacing residential wood burning devices with certified wood stoves and certified fireplace inserts to achieve emission reduction credits for the project. The survey should include:

- a. An explanation of why the survey is necessary (to mitigate the project PM10 emission impacts), and how it will benefit the public.
- b. Questions that request the information needed. This information should include: whether the resident has a wood stove or fireplace, what type wood stove or fireplace, the type and quantity (in cords) of wood that they burn, how often wood is burned in a winter week (between November 1 through March 31), and how often wood is burned the rest of the year.
- c. An attachment that describes the different types of wood stoves to help the public to answer the survey.

For your convenience, we have attached a sample of the survey form as reference.

BACKGROUND

Pages 6.8-23 and E-137 of the AFC indicate that the applicant will meet a best available control technology (BACT) carbon monoxide (CO) limit of 4 parts per million (ppm), and a BACT volatile organic compounds (VOC) limit of 1 ppm. In a response to California Unions for Reliable Energy (CURE) data request #19, dated October 12, 1999, the applicant has stated that the project will achieve a BACT CO limit of 6 ppm and a BACT VOC limit of 2 ppm.

DATA REQUEST

96. Please provide the correct BACT limits for CO and VOC for the project. If the emission concentrations are different than what was originally proposed in the AFC, please provide revised emission calculations that reflect the new BACT CO and VOC concentration levels.

Example of the survey form:

1. Do you have a fireplace or wood stove at your residence? (if not, please do not answer the rest of the questions and return the survey in the enclosed envelope).

_____ Yes _____ No

2. Would you be willing to participate in a fireplace or wood stove conversion program, at no cost to you, to reduce air emissions and improve energy efficiency? *Survey form should provide information regarding estimated potential for air quality reductions, efficiency improvements, time required for installation, and other benefits to the home owner (e.g., higher resale value for the home).*

_____ Yes _____ No

3. What type of wood burning equipment do you have? (Please see the description of different types of wood stove in the attachment)

_____ Fireplace
_____ Conventional wood stove (purchased and installed prior to 1986)
_____ Conventional wood stove that is certified by either EPA or Oregon
_____ Catalytic wood stove
_____ Pellet stove
_____ Masonry heater
_____ Wood stove (do not know what type)

4. How often do you burn wood in a winter week?

_____ times per week
_____ hours per day

5. How much wood do you burn during a typical winter (November 1 through March 31)?

_____ cords* (example 1 1/2 cord)

6. How much wood do you burn in a week for the rest of the year?

_____ cords*

* Note: One cord of wood is equal to a stack of 4 ft high, 4 ft wide and 8 ft long. One full size pick up load of wood is approximately a half (1/2) of a cord.